ORIGINAL RESEARCH PAPER

General Surgery

AMAYAND'S HERNIA : A CASE REPORT

KEY WORDS: Inguinal hernia , Appendix , Amayand hernia

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ABSTRACT

Hernia is a protrusion of viscus or part of viscus through the wall that encloses it. Inguinal hernia is a most common type of hernia. Hernia can present as reducible , irreducible , obstructed , strangulated. Contents of hernial sac can be omentum , small bowel. Amayand's hernia is a rare pathology involving appendix as a content in hernial sac. Appendix can be inflamed or normal. Diagnosis involves high clinical suspicion and radiological imaging. Timely management of these patients is necessary to prevent perforation and later peritonitis of entrapped appendix. This paper describes the case of 49 year old male patient, presented with inguinal hernia and diagnosed as Amayand hernia intraperatively.

INTRODUCTION

Hernia is a protrusion of viscus or a part of it through the wall that encloses that viscus. There are various types of hernia we deal in a clinical practice like inguinal hernia , femoral hernia , umbilical hernia , epigastric hernia , incisional hernia etc. Inguinal hernia is most common type of hernia . Content of inguinal hernia can be omentum , small bowel but presence of appendix in inguinal hernia is rare. Amyand's hernia is a rare pathology of an appendix with or without inflammation within the hernia sac is named after the French born English surgeon Dr. Claudius Amyand. [1]. It is diagnosed during hernioplasty, more commonly in children because of a patent vaginal process [2]. The incidence of finding an appendix within the hernia sac is rare, occurring in less than 1% of inguinal hernia patients and when complications arise such as inflammation, perforation, or abscess formation it becomes exceptionally rare with an incidence of about 0.1%. [3]. Surgeons are always concerned about the about the content in inguinal hernia as surgical management changes accordingly. Computed tomography play a important role in surgical management by diagnosing Amayand hernia preoperatively.

Case Report :

A 78 year old male presented to the OPD with the complain of swelling in the right groin which does not reduce on its own since 2 days. Swelling was associated with pain. No history of vomiting. He first noticed reducible swelling 4 years back. He had no other complaints. Patient is diabetic and hyertensive. No history of surgery in past. No known drug allergy. On physical examination patient had normal vitals. His Pulse rate was 90/min , BP 130/70mmhg and SPo2 98 percent . Per abdomen examination revealed non reducible swelling in right inguinal region , no surrounding inflammation and no signs of stramgulation. Preoperative investigations were normal. Patient taken up for surgery Right inguinal hernioplasty.

Introp findings : Hernia sac opened and appendix was noticed as content(figure 1). Appendix was normal. Appendicectomy done and sac excised , prolene mesh placed and fixed with pubic tubercle , upturn part of inguinal ligament and conjoint tendon. External oblique aponeurosis approximated and closure done.

Figure 1 : Appendix inside hernia sac

Patient discharged after 48 hours and followed up after one week for suture removal.

DISCUSSION :

Contents in inguinal hernia can be omentum and small bowel. Some unusual contents include bladder, meckels diverticulum (Littre hernia) , appendix (amayand) hernia. The incidence of a normal appendix being found inside an inguinal hernia sac is about 1%; however, only 0.1% of these cases have appendicitis. [4]. The underlying mechanisms that cause acute appendicitis within an Amyand's hernia include decrease blood supply of the appendix due to adhesions that may cause non-reducibility of the hernia and compression in the external ring originating from increases in intra-abdominal pressure [5]. In terms of inguinal hernia detection, the initial use of ultrasound possibly followed by CT, represents a sensitive and cost-effective progression for the evaluation of the patient with a clinical history suggestive of a hernia, enables the possibility of differentiating affiliated intra-abdominal organs [6,7]. The mainstay management is the open surgery, but in recent years the laparoscopy approach is summing cases; giving benefits of shorter hospital stay, faster recovery, less postoperative pain, among others [8]. Surgical management varies with type of amayand hernia [9]

Lossanoff and Basson's classification of Amyand's hernia.

Type of hernia	Description	Surgical management
Type 1	Normal appendix in an inguinal hernia	Reduction of hernia and mesh plasty, appendicectomy only in young patients
Type 2	Acute appendicitis in an inguinal hernia with no abdominal sepsis	Appendectomy and primary repair with no mesh
Type 3	Abdominal sepsis	Laparotomy and appendectomy with primary repair
Type 4	Acute appendicitis in an inguinal hernia with concomitant abdominal pathology	Laparotomy and appendectomy, primary hernia repair and management of abdominal pathology

CONCLUSION :

Amayand hernia is a rare clinical entity that is difficult to diagnose preoperatively. Diagnosis involves high clinical suspicion and radiological imaging. Timely management of these patients is necessary to prevent perforation and later

peritonitis.

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